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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,060	01/30/2004	Yusuke Nakazawa	Q78017	5491
23373	7590	01/23/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			TRAN, LY T	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

2/

Office Action Summary	Application No. 10/767,060	Applicant(s) NAKAZAWA, YUSUKE	
	Examiner Ly T. TRAN	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/4/04; 6/3/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brinkly (USPN 6,397,488) in view of Teraoka et al (USPN 6,652,084)

With respect to claims 1-3, 5, Brinkly discloses an ink jet recording apparatus comprising:

- Image forming means for forming an image on a recording medium by ejecting ink (Fig.2: element 22)
- Fixing means for fixing the image formed on the recording medium (fig.2: element 60,62,64,66)
- Collecting means (element 98) for selectively collecting air containing solvent from an atmosphere in proximity to fixing means
- Removing means for removing the solvent from the solvent containing air collected by the collecting means (element 102)
- Collecting means including shields means for shielding at least a region in proximity to the fixing means (element 80)

- Collecting means includes suction means for sucking (element 88) and collecting the solvent containing air from the region shielded by the shield means (element 98)
- Fixing means includes a heating section that heats and fixes the image (element 60,62,64,66)
- Shield means (element 98) shield at least a region in proximity to the heating section

However, Brinkly fails to teach the ink containing a solvent and color particles dispersed in the solvent.

Teraoka teaches the ink containing a solvent and color particles dispersed in the solvent (Column 6: line 40-67)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have ink containing solvent and color particles dispersed as taught by Teraoke. The motivation of doing so is to provide the ink with a fast penetrability even into a sized paper.

2. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brinkly (USPN 6,397,488) in view of Teraoka et al (USPN 6,652,084) as applied to claim 1 above, further in view of Wotton et al (USPN 6,390,618).

The combination of Brinkly and Teraoka fails to teach blowing means.

Wotton teaches blowing means (Fig.4: element 301).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a blowing means as taught by Wotton. He motivation of doing so is to improvement in drying time.

3. Claim 6 - 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brinkly (USPN 6,397,488) in view of Teraoka et al (USPN 6,652,084) as applied to claim 1 above, further in view of Lin (USPN 5,764,263).

The combination of Brinkly and Teraoka fails to teach preheating means being provided between the image forming means and the fixing means and the heat of air.

Lin teaches the preheating means can be before or after application of ink (Column 10: line 64-66) and can be at any location in the in jet printing process (Column 11: line 2-4) and Lin also teaches that the heating device and preheating means can use any known heating means including heating belt, a radiant heater or hot air.

It would have been obvious to one having ordinary skill in the art at the time the invention was made as modify to have the preheating means as taught by Lin. The motivation of doing is to obtain print quality in high-resolution printer without causing undesired curl of the printed material.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T. TRAN whose telephone number is 571-272-2155. The examiner can normally be reached on M-F (7:30am-5pm).

Art Unit: 2853

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT

Jan. 18, 2006



Stephen D. Meier
Primary Examiner